Gulf of Mexico Harmful Algal Bloom Bulletin

Region: South Florida

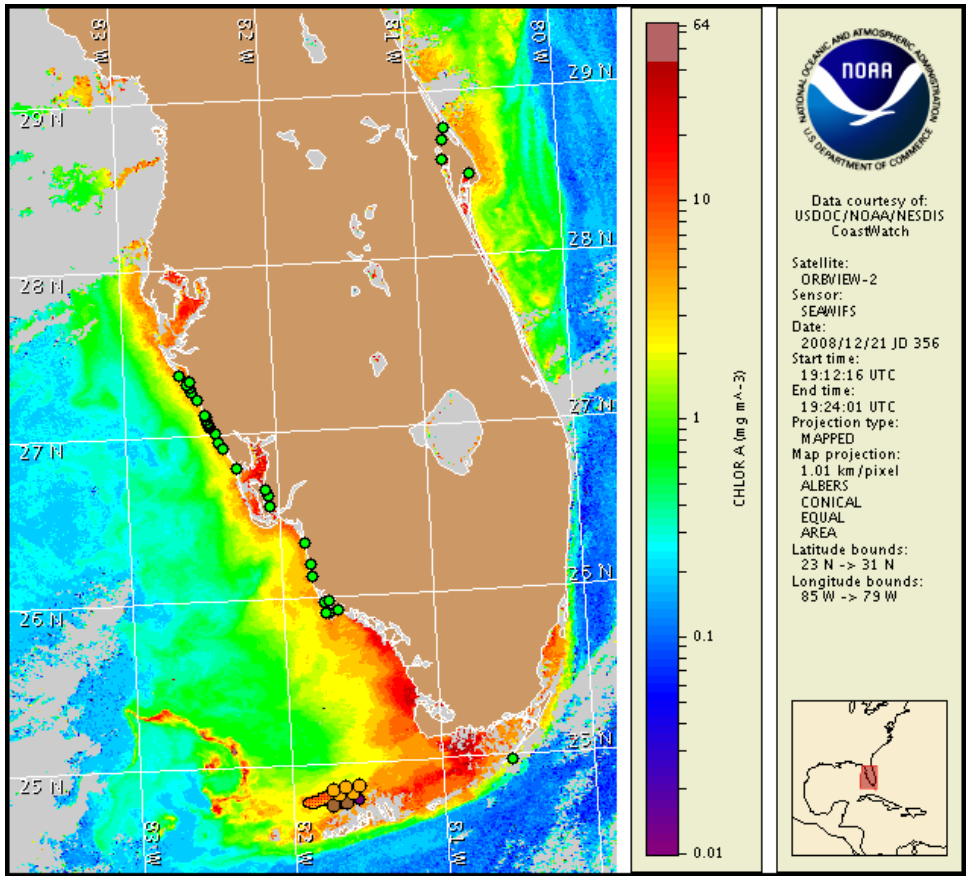
22 December 2008

NOAA Ocean Service

NOAA Satellites and Information Service

NOAA National Weather Service

Last bulletin: December 18, 2008



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from December 12 to 18 shown as red (high), orange (medium), yellow (low b), brown (low a), blue(very low b), purple (very low a), pink (present), and green (not present). For a list of cell count data providers and a key to the cell concentration categories, please see the HABFS bulletin guide:

http://tidesandcurrents.noaa.gov/hab/habfs_bulletin_guide.pdf

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Please note the following restrictions on all SeaWiFS imagery derived from CoastWatch.

1. Data are restricted to civil marine applications only; i.e. federal, state, and local government use/distribution is permitted.
2. Image products may be published in newspapers. Any other publishing arrangements must receive GeoEye approval via the CoastWatch Program.

Conditions Report

A harmful algal bloom has been identified on the gulf side of the lower Florida Keys in Monroe County. On the gulf side of the Lower Florida Keys, patchy moderate impacts are possible today and patchy very low impacts are possible tomorrow and Wednesday. Harmful algae has been identified in the Ten Thousand Islands area of southern Collier County. No impacts are expected in southern Collier County today through Wednesday, December 24.

Analysis

** Due to the federal holiday on December 25, an update to the conditions will be issued on Wednesday December 24. The next bulletin will be issued on Monday, December 29, 2008.**

A harmful algal bloom persists north of the Lower Florida Keys in Monroe County. SeaWiFS satellite imagery (12/20) indicates that the elevated chlorophyll patch (up to 6 μg/L) associated with this bloom has moved westward since the last bulletin. The patch now extends from 24°47’26’’N, 81°58’W eastward to 24°49’52’’N, 81°39’51’’W. The high chlorophyll feature (> 10 μg/L) now seen approximately 21 miles northwest of the Marquesas Keys has also moved westward. A sample taken from Islamorada indicates that *Karenia brevis* is not present (FWRI 12/18).

Up to Very Lowa concentrations of *K. brevis* were found in samples taken approximately 14 miles west of Sarasota County. Satellite imagery does not indicate elevated levels of chlorophyll in this region at this time.

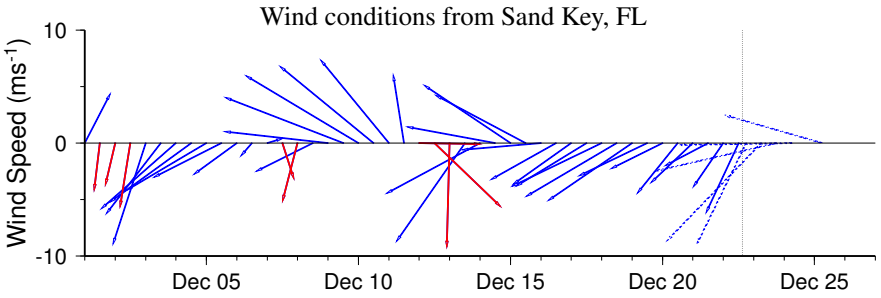
Harmful algae were reported in the Ten Thousand Islands region of Collier County from Tripod Key to shell Key (FWRI 12/8).

The chlorophyll patch previously reported on offshore Collier County has diminished in size and remains in the same general location. Satellite imagery indicates that it is centered at 25°49’46’’N, 82°12’7’’W.

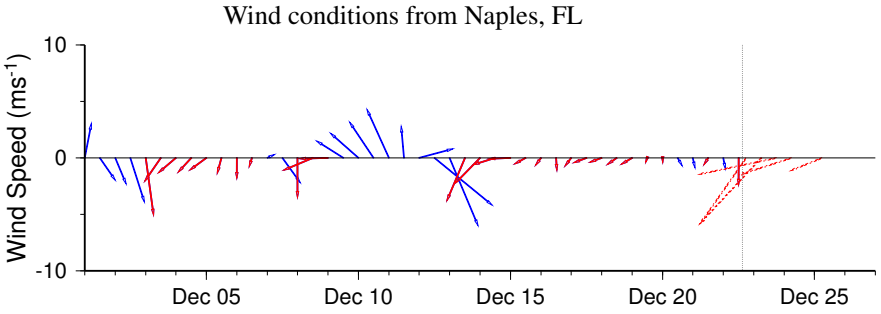
Continued sampling in all regions is recommended.

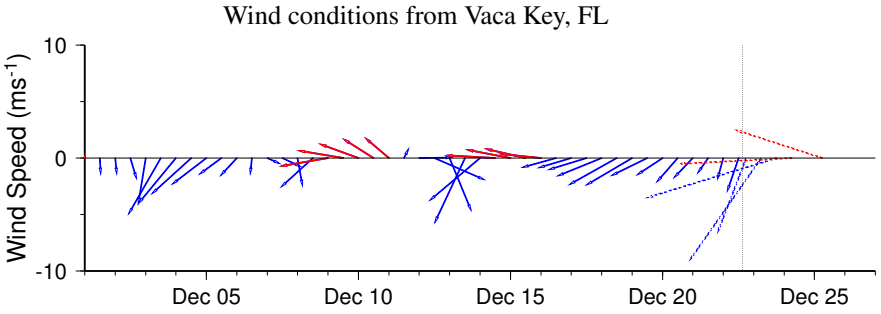
Conditions are favorable for continued westerly transport of elevated to high chlorophyll patches in the Florida Keys. Northeasterly winds today will increase the potential for impacts in the gulf side of the Lower Florida Keys.

Urízar, Lindley



Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts. Wind observation and forecast data provided by NOAA's National Weather Service (NWS).

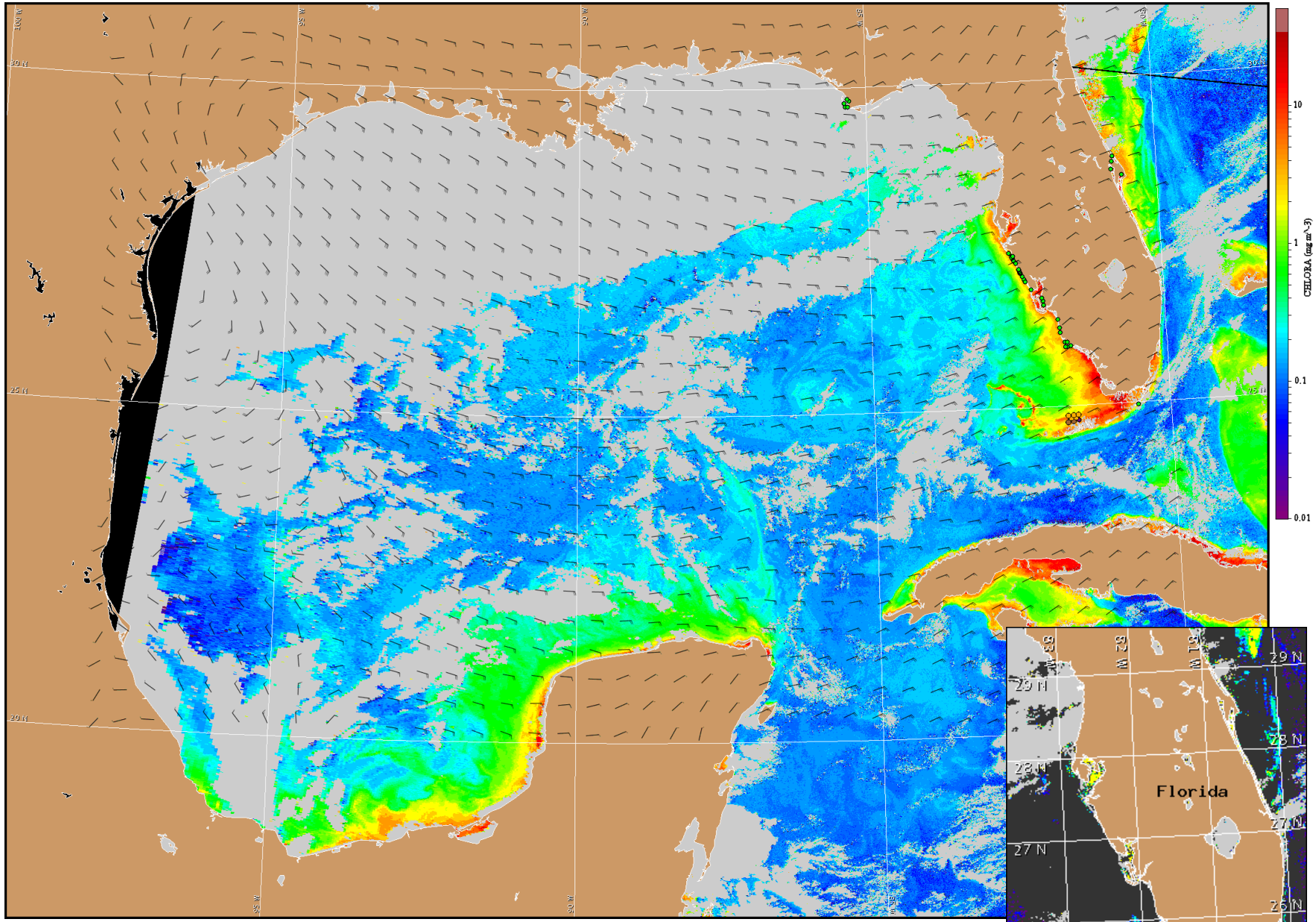




Wind Analysis

Southwest Florida & Florida Keys: Northeasterly winds today (10-20 kn, 5-10 m/s) and tonight. Easterly winds (15-20 kn, 8-10 m/s) on Tuesday. Easterly to southeasterly winds (10-20 kn) on Wednesday.

To see previous bulletins and forecasts for other Harmful Algal Bloom Bulletin regions, visit the NOAA CoastWatch bulletin archive: http://coastwatch.noaa.gov/hab/bulletins_ns.htm



Satellite chlorophyll image and forecast winds for December 23, 2008 12Z with Cell concentration sampling data from December 12 to 18 shown as red (high), orange (medium), yellow (low b), brown (low a), blue(very low b), purple (very low a), pink (present), and green (not present). For a list of cell count data providers and a key to the cell concentration categories, please see the HABFS bulletin guide:
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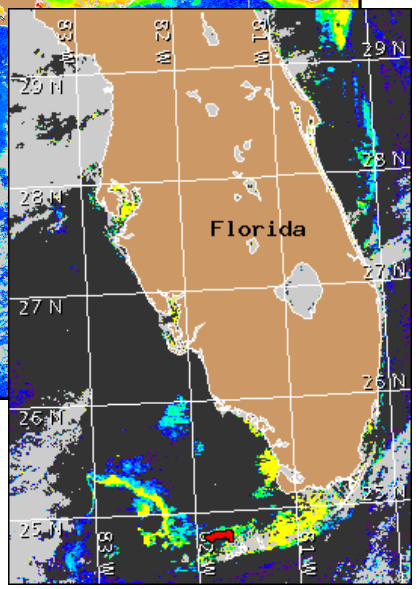

Verifi ed and suspected HAB areas shown in red. Other areas of high chlorophyll concentration shown in yellow (see p. 1 analysis for interpretation).